



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/449,706	11/24/1999	TAKAFUMI MIZUNO	35.C14035	6598
5514	7590	01/13/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			LUDWIG, MATTHEW J	
			ART UNIT	PAPER NUMBER
			2178	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/449,706	MIZUNO, TAKAFUMI
	Examiner	Art Unit
	Matthew J. Ludwig	2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 26 July 2004.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-4, 6, 7, 9, 10, 12-15, 17, 18, 20, 21 and 23-33 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-4, 6, 7, 12-15, 17, 18 and 23-33 is/are rejected.  
 7) Claim(s) 9, 10, 20 and 21 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

1. This action is responsive to communication: Amendment filed 7/26/04.
2. Claims 1-4, 6, 7, 9, 10, 12-15, 17, 18, 20, 21, and 23-33 are pending in the case. Claims 1, 12, and 23-27, are independent claims. Claims 28-33 have been added in accordance with the amendment filed 7/26/04.
3. The rejection of claims 1-4, 6-10, 12-15, 17-21, and 23 under 35 U.S.C. 103(a) as being unpatentable over Shafer in view of Murashita. Claims 5, 11, and 16, have been withdrawn pursuant to applicant's proposed amendment.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. **Claims 1, 12, and 23, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

**In reference to independent claim 1, 12, and 23, the claim recites the phrase, "generating step includes a redundancy *removing step of, when the* physical structure step". The phrase fails to proficiently join the distinct steps and provide a sufficient description of the limitation.**

Furthermore, the phrase, "are judged similar in said physical structure judging step and said semantic structure judging step, *regarding* the document elements as being of the same document element type", fails to connect the two distinct limitations within the independent claim. Appropriate correction required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-4, 6, 7, 12-15, 17, 18, and 23-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shafer et al., U.S. Patent Number 5,583,762 filed (8/22/94) in view of Murashita, U.S. Patent Number 6,330,574 filed (3/30/98) and in further view of Takahashi et al., USPN 6,105,022 filed 2/23/1998.**

**In reference to independent claim 1, Shafer discloses:**

The reduction acquires and operates discretely upon each grammar element of the hierarchical tree structure. Then a determination is made as to whether each acquired grammar element is combined with a rule of a given form of tree structure. See column 3, lines 30-40. The reference demonstrates a ***physical structure judging step*** when it states the '*determination is made as to whether each such acquired grammar element is combined with a rule.*' Shafer's grammar elements consist of tags within a document. The reference further discloses a reduced grammar or DTD evolved essentially as an automatic process from the originally produced sample document grouping. This process demonstrates the physical structure judging step method based upon the evaluation of SGML elements. Shafer makes reference to a '*reduction*

*based upon the semantics of SGML wherein, when the text is present at the same level of structure, then the structure probably is errant'.*

The reference does not explicitly disclose judging a semantic structure of each document element. However, Murashita teaches a special code discriminating unit for determining whether inputted coded data is a special code showing inputting of coded data of a tag (compare to (compare "*judging a similarity of the tags based on judgment results of said physical structure judging step*"). See column 6, lines 55-67. The reference demonstrates a tag evaluation process as well as a decoding step, which would have provided a proficient technique of merging a tag with a decode table.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Shafer and Murashita before him at the time the invention was made, to modify the document type definition methods taught by Shafer to include the tag discriminating methods of Murashita, because the tag methods would have provided a designer the added benefit of having a reduced grammar.

Shafer discloses a reduced grammar or DTD evolved essentially as an automatic process from the originally produced sample document grouping. However, the reference fails to disclose a judging step, wherein after the judging step occurs, excluding one document element name from a document type definition takes place. Takahashi provides a judging method based on both semantic information and physical location. See column 15, lines 1-67 and column 16, lines 1-67. Furthermore, the reference provides a means for excluding one document element if it is found to be the same as that found within the structured index. The SGML document structure analysis methods as taught by Takahashi provide a proficient structured-text searching method.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combine the SGML defined grammar disclosed by Shafer with the structure analysis methods taught by Takahashi, because it would have given the author the added benefit of not only being able to extract tags from a tag structure, but also providing the author the tools for analysis of a tag structure and finding matches within the tag structure.

**In reference to dependent claim 2 & 29**, Shafer discloses:

The program has looked to determine whether there is text around the tag that was found, and that text is marked PCDATA. The program thus knows where the text is and knows where the tags are. The reference does not explicitly disclose judging the physical structure of the document element based on an indentation or a blank line; however, the generation and reduction methods of Shafer demonstrate the analyzing the tags as well as text within the tags. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an indentation as part of the analysis of text because it would have extended the benefit of the tag extraction process and developed tag list.

**In reference to dependent claim 3 & 30**, Shafer discloses:

The program has looked to determine whether there is text around the tag that was found, and that text is marked PCDATA. The program thus knows where the text is and knows where the tags are. The reference does not explicitly disclose judging the physical structure of the document element based on an indentation or a blank line; however, the generation and reduction methods of Shafer demonstrate the analyzing the tags as well as text within the tags. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have

included an indentation as part of the analysis of text because it would have extended the benefit of the tag extraction process and developed tag list.

**In reference to dependent claim 4, Shafer discloses:**

The program has looked to determine whether there is text around the tag that was found, and that text is marked PCDATA. The program thus knows where the text is and knows where the tags are. The reference does not explicitly disclose judging the physical structure of the document element based on an indentation or a blank line; however, the generation and reduction methods of Shafer demonstrate the analyzing the tags as well as text within the tags. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an indentation as part of the analysis of text because it would have extended the benefit of the tag extraction process and developed tag list.

**In reference to dependent claim 6 & 28, Shafer discloses:**

A reduction based upon the semantics of SGML wherein, then text is present at the same level of structure, then the structure probably is errant. See column 14, lines 45-50.

**In reference to dependent claim 7, Shafer discloses:**

In carrying out the overall reduction, a single grammar element is acquired and a reduction as elected by the reduction guide is carried out with respect to the grammar element. The next grammar element is accessed and the same procedures are carried out. See column 13, lines 18-25.

**In reference to dependent claim 12-15, 17, 31-33** the limitations of these claims are the apparatus for carrying out the method of claims 1-4, 6, 7, 9, 10, and are rejected under the same rationale.

**In reference to independent claim 23**, the limitations of this claim is the computer program product for carrying out the methods of claim 1, and is rejected under the same rationale.

**In reference to claims 24-27**, the claims reflect similar limitations as those recited in independent claim 1, and therefore are rejected along the same rationale

*Allowable Subject Matter*

8. Claims 9, 10, 20, 21, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

9. Applicant's arguments filed 2/9/04 have been fully and carefully considered but they are not persuasive.

Applicant argues on pages 14 & 15 of the amendment that the references do not teach or suggest the limitations of independent claim 1 12, and 23. Applicant further states that Shafer does not disclose the feature of regarding the document elements as the same document element type, and executing a predetermined process on the document elements being regarded as the same document element type; however, the limitation is a newly added limitation and therefore, Applicant's arguments with respect to claim 1-4, 6, 7, 9, 10, 12-15, 17, 18, 20, 21, and 23-33 have been adjusted accordingly.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Ludwig whose telephone number is 571-272-4127. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4124.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML  
December 30, 2004

  
STEPHEN HONG  
SUPERVISORY PATENT EXAMINER